

THE AMERICAN SOCIETY OF  
ADDICTION MEDICINE HANDBOOK ON

# Pain and Addiction

Edited by

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ASAM is a member-driven organization, representing over 3,200 physicians and associated professionals dedicated to increasing access and improving the quality of addiction treatment; educating physicians, other medical professionals and the public; supporting research and prevention; and promoting the appropriate role of physicians in the care of patients with addictions.

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## Chapter 9

### Understanding and Preventing Opioid Misuse and Abuse

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Factors That Contribute to Opioid Abuse	98
Strategies to Reduce the Risk of Opioid Abuse	103
Policies on Replacing "Lost" Prescriptions and Requests for Early Refills	107
Conclusion	109

Opioids have a central role in relieving human suffering today, as they have for thousands of years. They also cause great harm. This duality has provoked confusion and concern on the part of policymakers and the public. Opioids confront physicians and other health care professionals with the dilemma of how to balance their patients' need for the treatment of pain or addiction with the risk that prescribed opioids will be misused by the patients to whom they are prescribed, or given or sold to others. This duality constitutes a major quality-assurance and risk-management issue for all health care professionals.

In recent years, the significance of the problem has increased exponentially as the use of opioids to treat non-cancer pain has become widespread, leading to growing reports of opioid misuse, addiction, overdose, and death [1,2,3,4,5,6]. (See Table 9.1 for descriptions of appropriate and inappropriate opioid use.)

Given the need to balance such risks and benefits, how do physicians decide who should receive an opioid prescription? Are opioids more likely to be prescribed to and misused by some patients than by others? How can physicians organize their practices so as to afford protection to themselves and their patients as they pursue the optimal management of pain or addiction? [1] This chapter will explore strategies for addressing the dilemma.

TABLE 9.1 Factors That Contribute to Opioid Misuse and Abuse

Characterization	Definition	Clinical Examples	Intervention Strategies
<b>Appropriate Use</b>	Use of an opioid as prescribed for a defined condition, with no signs of misuse or abuse.	A 10-day course of post-operative opioid analgesics, taken as prescribed.	Explain to the patient that the prescribed opioids will be used only for a limited time. Assist with safe and comfortable withdrawal when use ends.
<b>Misuse or Inappropriate Use</b>	Use of an opioid for a reason other than that for which it was prescribed or in a dose different than prescribed, but without a pattern of ongoing misuse leading to disability or dysfunction.	— A single episode of opioids use twice as often as prescribed. — Use of a "leftover" prescribed opioid for a new clinical problem without consulting a physician.	Educate the patient about proper use of the opioid and the risks associated with misuse.
<b>Prescription Opioid Abuse</b>	Use of an opioid (whether prescribed or not) outside the normally accepted standards of use, resulting in disability and/or dysfunction.	— Continued misuse despite interventions. — Use of a prescribed drug for "recreational" purposes unrelated to any medical condition. — Altering or forging a prescription to obtain more opioids than prescribed.	— Express concerns in an empathetic way. — Discontinue the medication that is being abused. — Consult with an expert (e.g., an addiction or pain specialist). — Immediately stop prescribing all opioids and other controlled drugs.
<b>Catastrophic Use</b>	Use of a controlled substance in ways that involve illegal activity or that place the patient at risk of death.	— Altering or forging a prescription to obtain more opioids than prescribed.	— Immediately stop prescribing all opioids and other controlled drugs.



## Factors That Contribute to Opioid Abuse

Three major influences help shape the current situation: *drug factors*, *physician factors*, and *patient factors* [1,7–10].

### Drug Factors

Over the course of human history, virtually all substance abuse and addiction has involved the use of substances that produce brain reward by way of an acute surge of dopamine from the mid-brain to the forebrain (an important concept that has replaced the older notions of “euphoria producing” or “mind-altering” substances) [2,7,11–16]. Historically, in clinical practice, confusion has arisen between the term “addiction” or the *Diagnostic and Statistical Manual 5* (DSM-5) term “substance use disorder moderate or severe,” and the term “physical dependence,” which is associated with withdrawal symptoms when an opioid is abruptly discontinued. Many non-addicting substances—including antihypertensive and anti-epilepsy agents—produce withdrawal symptoms when they are abruptly discontinued. On the other hand, many addicting substances do not produce prominent withdrawal symptoms on abrupt discontinuation, including cannabis and central nervous system (CNS) stimulants. Patients can be addicted to a substance with or without physical dependence, and patients can be physically dependent on a substance with or without addiction.

The four major classes of brain-rewarding substances are:

- *Stimulants*, such as cocaine, methamphetamine, nicotine, caffeine, and certain prescribed stimulant medications.
- *Sedative-hypnotics*, including alcohol, benzodiazepines, barbiturates, and other hypnotics.
- *Opioids*, including illicit drugs such as heroin and prescription analgesics.
- *“Other drugs,”* including the psychedelics, dissociative anesthetics, cannabinoids, and hallucinogens.

As mentioned earlier, the drugs in each of these classes either directly or indirectly produce an *acute release of dopamine* from the mid-brain (ventral tegmental area [VTA] and nucleus accumbens) to the forebrain. It is this characteristic dopamine surge that makes certain drugs rewarding to the brain, and hence liable to “social use,” abuse, and even addiction in susceptible patients [6,7].

The individual characteristics of the dopamine surge produced by various controlled drugs and various routes of administration render them more or less likely to be abused—that is, more or less rewarding to the brain. Drugs with a more rapid onset of action are more likely to be sought for purposes of abuse

than those with a slower onset, with a corresponding increase in their “street” or market value. The variability of each substance in terms of the rapidity and intensity of brain reward is reflected in the placement of each controlled drug in one of five progressively more restrictive schedules of the Federal Controlled Substances Act (CSA) [1,7,17,18].

### Physician Factors

Physicians report a lack of training in the appropriate prescribing of controlled drugs, specifically in the areas of differential diagnosis and management of acute chronic and malignant pain, anxiety and depression, insomnia, and addiction [7,10]. It is in these areas of clinical practice that physicians commonly confront dilemmas about prescribing controlled drugs, yet it is precisely in these areas where most physicians report suboptimal education and clinical preparation. The resulting problems have been classified by the American Medical Association as the “4 D’s”—Dated, Deceived (or Duped), Disabled, and Dishonest physicians [8]. To these, many experts add a fifth “D”—the Defendant practitioner—and a sixth: the Distracted practitioner [11,12].

- *Dated physicians* are those whose knowledge of one or another aspect of patient care is out of date. Therefore, they are likely to prescribe the wrong drug or dose to the wrong patient, or to prescribe a controlled drug when one is not required [8].
- *Deceived or Duped physicians* are those who are misled by patients about the presence of symptoms or conditions that would indicate the need for a controlled drug [8]. Virtually any physician can be deceived by so-called professional patients, who often employ very sophisticated ruses.
- *Disabled physicians*—that is, those with psychiatric or medical disorders (including addiction)—have been characterized as more lax in their prescribing to others [8], although there is good evidence that this is not the case [13].
- *Dishonest physicians* typically prescribe large amounts of controlled drugs for other than legitimate medical purposes and generally for money. Fortunately, this group is an exceedingly small part of the overall physician population [8].
- *Defiant physicians* have come to believe that they have greater expertise in a specific area of practice than everyone else, and practice in ways that are not supported by the evidence base. When such practices involve prescribing controlled drugs, the result can be a marked surge in illicit local availability of such drugs [12,13].
- *Distracted physicians* are practitioners who are so overwhelmed by patient care duties or the related paperwork that they lose track of their controlled drug prescribing, or refills, or the monitoring strategies necessary when prescribing controlled drugs.



Some experts have described two additional physician factors that appear to facilitate inappropriate prescribing: *pathological enabling* and *confrontation phobia* [11]. One of the most ennobling characteristics of the medical profession is the willingness of physicians to do whatever is necessary to help patients achieve an improved quality of life; however, this quality of “enabling” can become detrimental when the physician accedes to patients’ nonmedical drug-seeking behavior. The situation worsens if the physician is reluctant to confront such a patient about his or her inappropriate behavior.

It is widely recognized that as long as patients need and physicians prescribe controlled drugs, some proportion will be used non-medically or diverted to intentional abuse; however, certain physician practice characteristics heavily influence the *proportion* of controlled drugs that are available for diversion or abuse. Fortunately, each of the risky prescribing behaviors described here is readily corrected.

Practices that *increase the risk of diversion* include [1–3]:

1. Willingness to prescribe relatively potent controlled drugs at the patient’s first visit.
2. Willingness to initiate a controlled drug prescribing regimen without obtaining a complete patient history, especially the history of prior substance abuse and other data (including screens for a personal or family history of substance use disorders).
3. Failure to order periodic toxicology screens for patients to whom controlled drugs are prescribed on a continuing basis.
4. Lack of collaboration with colleagues (e.g., physicians who treated a patient in the past, other physicians currently treating the patient, pharmacists, and other expert consultants, including specialists in pain and addiction).
5. Continued prescribing despite evidence of out-of-control behavior by a patient (e.g., alteration or forgery of prescription orders; reports of selling, bingeing, or overdose; use of an opioid in combination with alcohol and other drugs; multi-sourcing; unplanned escalation in dose; multiple requests for early refills, and/or threatening behavior).
6. A tendency to underemphasize the aspects of a treatment plan that do not involve pharmacotherapy.
7. Willingness to concomitantly prescribe multiple controlled drugs, from the same and different classes, over long periods of time.

## Patient Factors

*Addiction* is defined as a chronic disorder, with clear physical, psychological, and genetic components. It is characterized by the intermittent, repetitive *loss of control* over the use of one or more brain-rewarding substances, resulting in repeated *adverse consequences* in the patient’s life.

As it relates to the use of prescribed opioids, addiction can be conceptualized as a brain reward in susceptible individuals, characterized by a persistent craving for more of the drug, continued escalation in use despite adverse consequences, increasingly global dysfunction in the patient’s life, and a willingness to cause stress in other meaningful relationships in pursuit of the pathological relationship with the opioid drug. Another behavior that is a hallmark of addiction is *dishonesty*, typically including dishonesty with the prescribing physician, as well as *craving* for the substance when it is not present. Addiction-prone individuals have been described as having “high-risk brains” when it comes to the use of brain-rewarding substances of all types.

When applied to opioid use, addiction pathology typically results in rapid escalation in dose, patient reports that the medicine is “ineffective,” requests for early visits and refills, reports of “lost” prescriptions and medicines, and a developing sense of tension in the physician–patient relationship [1–3,18–20].

When a patient who is addicted to opioids or other controlled drugs loses control of his or her drug use, the supply runs short. Such a patient has relatively few options: (1) pressure the physician for more medication, (2) pressure the pharmacist for early refills, or (3) seek additional sources of supply (as from family members, “doctor shopping,” or purchases from illicit sources).

In contrast, the patient who is not at risk for addiction will not experience brain reward when using controlled drugs as prescribed and thus will not misuse these medications. Such patients—who clearly constitute the vast majority to whom controlled drugs are prescribed—tend to remain stable on low doses of medication for extended periods of time, and to report that the prescribed medication is effective. Indeed, the chief clinical challenge often is to ensure that such patients take the prescribed medications as often and in the dose prescribed. Inappropriate fears of addiction on the part of patients (or their caretakers) where there is no history of such addiction is a common reason for underuse of prescribed opioids and other controlled drugs by patients with non-addictive “low-risk” brains [1,18].

It is important for physicians to be able to clearly distinguish between typical medical use of opioids and other controlled drugs and typical nonmedical use. The former does not involve the brain reward associated with addiction, while the latter does. Typical medical use is oral and at routine doses, while typical nonmedical use involves excessive doses, often by routes of administration other than oral, and at times and in ways that are more similar to an alcoholic binge than to the use of a vitamin tablet. This distinction needs to be explained to patients who are prescribed opioids so that they (and their family members) are reassured and so that those who do not use the prescribed drug appropriately can recognize the pathological nature of their behavior.

Factors that are helpful in distinguishing medical from non-medical use are described in Table 9.2.

The level of risk for abuse of or addiction to opioids varies from one individual to the next, but a history of illicit substance use and a willingness to use



**TABLE 9.2** Characteristics That Help Distinguish Medical from Nonmedical Use of Opioids

Characteristic	Medical Use	Nonmedical Use
Intent	Used to treat a diagnosed illness	Used to party or to "treat" distressing effects of alcohol or other drug abuse
Effect	Improves the user's quality of life	Worsens the user's quality of life
Pattern	Stable and medically justified	Unstable; usually involving escalating or high doses
Control	Quantity and frequency of use is shared honestly with the physician	Self-controlled
Legality	Legal	Illegal

controlled substances at doses and by routes of administration that are not prescribed all are associated with a markedly elevated level of risk. The single strongest risk factor for future misuse, abuse, or addiction to a prescribed controlled drug is a current or past history of abuse of any substance.

Patient behaviors that suggest loss of control include [1,2,21]:

- *Early requests for refills* (the patient who makes an urgent, unscheduled visit late in the day, or who claims he/she "took too many," "lost the prescription," "washed it with the laundry," "the dog ate it," "left it in . . ." "the pharmacist shorted the count," "spilled it in the toilet," or had his/her supply lost, stolen, etc.).
- *Multi-sourcing* (recruiting surrogates to obtain the medication, visiting multiple physicians, purchasing drugs over the Internet or from illicit drug dealers, etc.).
- *Intoxicated behavior* (slurred speech or disinhibited calls to the office, presenting to pharmacies under the influence, emergency department visits for repeated falls or other traumatic injuries, accidental overdoses, etc.).
- *Pressuring behaviors* (begging or pleading, being excessively complimentary, breaching boundaries, vague or even clear threats to harm self or others, and the like) [1,19].

If the physician fails to respond firmly to these out-of-control behaviors—such as by stopping prescribing of the controlled drug—the patient's out-of-control addictive behavior is likely to progress to increasingly aberrant levels, with escalating adverse consequences. Such adverse consequences commonly include domestic problems such as violence and divorce, arrests and incarceration, hospitalization, accidental overdose, suicide attempts, and even death. It is for these reasons that it is critically important for physicians who are prescribing opioids and other controlled drugs to closely monitor their patients for aberrant behaviors, so as to avoid doing harm while trying to help the patient achieve improved comfort and function [1].

## Strategies to Reduce the Risk of Opioid Abuse

The same three factors—physician factors, patient factors, and drug factors—that contribute to abuse of prescription drugs also contribute to its mitigation and management. By developing strategies to address each of these three factors, physicians can make substantial progress in achieving an appropriate balance in prescribing [7].

### Physician Factors

It is widely recognized that some level of prescription drug diversion and abuse is unavoidable. However, specific physician practice behaviors can *minimize* the risk that controlled drugs will be diverted or abused, while providing appropriate therapy to low-risk patients [1]. Basic principles for all physicians to consider when prescribing controlled drugs—and especially when prescribing opioids on a long-term basis—include the following:

1. Develop skills to efficiently and effectively screen for a history of substance abuse or addiction in patients with "high-risk brains," and perform this screening *before as well as after* initiating therapy with an opioid or other controlled drug [2,14,15].
2. Avoid prescribing opioids or other controlled drugs to patients with "high-risk brains," especially on a long-term basis. High-risk drugs combined with high-risk brains are likely to result in high-risk behavior, with attendant harm to the patient, family, community, and even the prescriber.
3. Become knowledgeable about the differential diagnosis and management of acute versus chronic versus malignant pain.



drug, evidence suggests that harm is being done (such as through diversion or abuse), it is ethically mandatory to reassess the entire clinical situation and to change treatment strategies as quickly as possible [5,7].

Identification of a patient who is abusing prescribed opioids or other controlled drugs presents a major therapeutic opportunity. Every physician needs to have a plan for working with patients who are misusing or addicted to alcohol and other drugs, including opioids. Physicians must be proficient in putting this plan into action. Such a plan typically involves ending the use of all controlled drugs, working with the patient and the patient's family, referral to an addiction expert for assessment, (perhaps) placement in a formal addiction treatment program, long-term participation in a 12-Step mutual help program such as Alcoholics Anonymous or Narcotics Anonymous, and follow-up of any medical or psychiatric sequelae.

If opioids are involved, the patient should be offered medical withdrawal options, referral for office-based opioid treatment (buprenorphine) or a clinic-based opioid maintenance (methadone) program, as well as an "overdose plan" to share with friends, partners, and/or caregivers. Such a plan would contain information on the signs of overdose and how to administer naloxone or other-where provide emergency care (such as by calling 911) [22]. (Additional information on opioid overdose is found in Chapter 13 of this Handbook.)

## Patient Factors

Patients share with physicians a responsibility for safe and appropriate use of prescription medications, including opioids (see Table 9.3). Some patients fail to fulfill this responsibility because of lack of information or failure to appreciate the resulting risks. In response, multiple federal agencies and private-sector organizations have launched public education campaigns that involve public service announcements for television and radio, as well as distribution of print messages about the dangers of misusing or abusing opioids and other prescription medications. Nevertheless, there is no substitute for physician advice at the time an opioid or other drug is prescribed. This is the "teachable moment" when the physician should explain that it is illegal to sell, give away, or otherwise share their medication with others, including family members.

The patient's obligation also extends to keeping the medication in a locked cabinet or otherwise restricting access to it, and to safely disposing of any unused supply.

## Drug Factors

Among emerging solutions that focus on the drugs themselves are state programs to monitor drug distribution through PDMPs, which are helpful in

4. Rigorously employ a process of informed consent and treatment agreements when prescribing opioids or any other controlled drugs, and carefully inform patients of their ethical and legal obligations. Document this conversation in an informed consent form specifically designed for long-term management of patients who are prescribed opioids or other controlled drugs.
5. Adopt a policy of refusing requests for early refills (see the discussion later in the chapter).
6. Collaborate with pharmacy colleagues by writing complete and clear prescription orders, as well as responding promptly and completely to their questions or requests for verification.
7. Never commit to long-term prescribing of opioids in the presence of diagnostic uncertainty or discomfort about the indication.
8. Stay in your area of expertise, both in terms of the conditions you treat as well as in the medications and doses you prescribe. Saying "I am so sorry, but no," early in the course of treatment is much better than having to do so later on.
9. Always stop or revise the therapeutic regimen if a patient demonstrates any concerning or out-of-control behaviors.
10. Do not prescribe controlled drugs to yourself, family, or close friends or colleagues—sufficient therapeutic distance is essential to effective patient monitoring.
11. Never prescribe a controlled drug unless there is a medical record to document the presence of a physician-patient relationship and a legitimate medical purpose for the prescription.
12. Perform periodic toxicology testing when prescribing a controlled drug over the long term. Such testing is useful in establishing compliance and in detecting the use of other, non-prescribed controlled substances. Drug test monitoring is especially helpful because a high percentage of patients who abuse opioids and other controlled drug prescriptions also abuse multiple licit and illicit drugs, many of which are readily identified on routine urine testing. (See Chapter 11 of this Handbook for a discussion of urine drug testing.) [1,5,7]
13. Follow a thorough, carefully structured monitoring strategy once prescribing is initiated.
14. Regularly check your state's (and neighboring states') Prescription Drug Monitoring Program (PDMP) and the patient's local pharmacy printout. This helps avoid patient multi-sourcing and helps ensure the patient's adherence to all of the prescribed medications—non-controlled drugs as well as the controlled ones.

Remember that one of the basic principles of medicine is "First, do no harm, then comfort always and cure sometimes." If, in the process of attempting to provide comfort to a patient by prescribing an opioid or other controlled



**TABLE 9.3 Physicians' and Patients' Shared Responsibility for Safe and Appropriate Use of Opioids**

<i>Responsibilities of the Physician</i>	<i>Responsibilities of the Patient</i>
To have the patient's well-being as his or her primary concern.	To seek medical attention for conditions that a physician can cure or ameliorate.
To formulate a working diagnosis of the patient's problems based on the patient's history and findings of the physical examination.	To be truthful in reporting historical information and to cooperate with the physical examination.
To order appropriate laboratory tests (or consultations with specialists) to clarify the diagnosis.	To obtain the laboratory tests or consultations requested by the physician.
To prescribe appropriate therapy. (This assumes that the physician is acting within his or her scope of expertise.)	To comply with the physician's instructions. (This includes taking medications as prescribed.)
To monitor the effects of treatment, including the side effects or toxicity of any drugs prescribed.	To report symptoms accurately.
To continue to follow the patient until the condition is relieved or the patient's care is assumed by another physician.	To follow through with appointments until discharged by the physician.

Source: Wesson DR, Smith DE. Prescription drug abuse. Patient, physician, and cultural responsibilities. *West J Med.* 1990;152(5):613-616.

identifying "doctor shopping" and other methods of multi-sourcing. Accessing other programs that address Internet sales of controlled drugs (many of which are substandard or counterfeit) also are important steps.

Changes in drug formulation also hold the promise of significantly reducing tampering and abuse. On the horizon are novel compounds that will depend on enzymatic action in the body to convert to, and deliver, their medicinal properties. In theory, such novel delivery systems will prevent the extraction of the active ingredient from the bonded adjuvant [20]. However, "abuse-resistant" is not synonymous with *abuse-proof*, so the physician still must use care in prescribing, and the patient must exhibit responsibility in using these drugs.

### Special Precautions with New Patients

Many experts recommend that additional precautions be taken with new patients, particularly those to whom the physician considers prescribing opioid analgesics and other medications with a significant potential for abuse [21]. Recommended precautions include the following:

- *Obtaining Identification.* The patient's identity should be verified by asking for proper identification.
- *Consulting Past Providers.* In addition to the patient history and examination, the physician should determine who has been caring for the patient in the past, what medications have been prescribed and for what indications, and which other substances (including alcohol, illicit drugs and over-the-counter [OTC] products) the patient has been using. With the patient's consent, a good-faith effort must be made to obtain medical records from health care professionals who have treated the patient in the past.
- *Limiting Prescriptions.* In non-emergency situations, the physician should prescribe only enough of an opioid to meet the patient's needs until the next appointment. The patient should be directed to *return to the office* for additional prescriptions, as telephone orders do not allow the physician to reassess the patient's continued need for the medication.

In emergency situations, the physician should prescribe the smallest possible quantity of medication (for example, no more than a one- to three-day supply of an opioid analgesic) and arrange with the patient for a return visit the next day [1,6,7,26].

### Policies on Replacing "Lost" Prescriptions and Requests for Early Refills

Treatment agreements generally state that "... lost medications will not be replaced regardless of the reasons for such loss" [22]. However, several guidelines advise that actual decisions be individualized by the prescribing physician, based on multiple sources of information (including in-person evaluation of the patient), using strategies to reorient patients into more complete adherence to the treatment regimen [6,7,23-26].

Adherence can be a complex process, and patients frequently experience setbacks, especially early in the treatment process. A high index of suspicion is warranted when patients claim to lose prescriptions or report that they have been stolen. However, on rare occasions, patients do experience extenuating circumstances (such as a documented assault, hurricane-related evacuations, or vomiting



due to a gastrointestinal disorder), and a patient may actually lose his or her prescription or medication. Physicians need to establish clear policies on how such requests will be evaluated, so that staff and patients know what to expect [22].

Most physicians experienced in treating patients with substance use disorders view requests for replacement prescriptions as a reason for great concern (i.e., a "red flag") that may signal that the patient is taking more medication than prescribed, or not taking the medication and diverting it for profit instead. Other red flags include inconsistent toxicology screens, inability to consistently keep appointments, requests for early refills, a sudden request for a dose increase in a previously stable patient, purported intolerance or allergy to naloxone, lost prescriptions, use of multiple prescribers, prescription forgery, ongoing close ties to those who illegally sell opioids, and close acquaintances or relatives who are addicted to opioids but not in treatment [1,6,23].

A patient who has a good track record of adherence to appointments and following up referrals would be treated differently from someone who never has stabilized in treatment. Egregious behaviors such as selling prescribed medications may result in immediate discontinuation of controlled drug prescribing, or even dismissal from the practice. Threatening behavior on the part of the patient is typically best handled by ending the physician-patient relationship [6,23].

In considering requests for replacing "lost or stolen" prescriptions, physicians and other team members should [6]:

- First, consider the relative frequency of early refill requests involving prescriptions for controlled drug prescriptions compared to those for non-controlled drugs. Many clinicians have virtually never been asked for an early refill for a non-controlled drug, while requests for early refills involving controlled drugs are not uncommon. That is why most informed consent forms or patient-prescriber agreements (PPA) explicitly state that lost or stolen controlled drug prescriptions will not be replaced on a routine basis.
- Meet promptly with the patient for evaluation, with special emphasis on detecting the presence of signs or symptoms of withdrawal.
- Use motivational interviewing techniques to encourage the patient to be more forthcoming regarding the reasons for requesting an early refill.
- Check available state prescription drug monitoring programs for any evidence that the patient has filled prescriptions from multiple prescribers.
- Perform a urine drug screen or other biological monitoring to determine the patient's current status.

If the patient demonstrates withdrawal symptoms, it is incumbent on the prescriber to treat these symptoms or refer the patient for urgent treatment. Doing otherwise can be considered a form of patient abandonment.

If the prescriber decides to provide an early refill, it should be used as an opportunity for patient education and to reinforce the informed consent form or PPA.

Prescribers should avoid any pattern or formula for providing refills of controlled drugs (the "one, two, or three strikes" approach).

Repeated reports of lost prescriptions must be regarded as an indicator of substance use disorder, out-of-control behavior, or drug diversion, especially when corroborated by information from urine drug tests or PDMPs. Patients who demonstrate any of these behaviors should not continue to receive prescriptions for controlled drugs. In many cases, such patients should be referred to inpatient or outpatient medical withdrawal services [23].

## Conclusion

Abuse of prescription opioids and other controlled substances is disconcerting in a way that is different than abuse of illegal opioids such as heroin. Prescription opioids are socially sanctioned to relieve the pain of surgery, medical illness, or substance use disorders (as in office-based opioid agonist treatment), and few persons would want their access to opioid medications unduly restricted. The misuse and abuse of opioid medications thus prevents the intended medical order: instead of being agents that ameliorate disease, the medications themselves—and the physicians who prescribe them—become agents of another disease—substance use disorder or addiction. In this increasingly common situation, health care professionals and pharmaceutical manufacturers become facilitators of illness rather than of health [27].

The history of controlled drug prescribing leads to the recognition of physician factors, patient factors, and drug factors that can raise or reduce the risk that such valuable medications will be subjected to diversion and abuse. Educational and practice management strategies can mitigate and manage such risks. Adopting approaches like those outlined in this chapter can help physicians address the prescription drug abuse problem, while still providing appropriate treatment to those without problematic responses to controlled drugs, and thus contribute to an overall improvement in the quality of care for all patients [1,7].

## For More Information on the Topics Discussed:

American Society of Addiction Medicine (ASAM):

Wunsch MJ, Gonzalez PK, Hopper JA, McMasters MG, Boyd CJ. Pharmaceutical use, misuse, and abuse of prescription medications (Chapter 34). In RK Ries, DA Fiellin, SC Miller, R Saitz, eds. *The ASAM*



*Principles of Addiction Medicine, fifth Edition.* Philadelphia, PA: Wolters Kluwer; 2014.

Finch JW, Parran TV Jr., Wilford BB, et al. Clinical, ethical and legal considerations in prescribing drugs with abuse potential (Chapter 11.1). In RK Ries, DA Fiellin, SC Miller, R Saitz, eds. *The ASAM Principles of Addiction Medicine, fifth Edition.* Philadelphia, PA: Wolters Kluwer; 2014.

**Federation of State Medical Boards (FSMB):**

[updated version available]

*Guidelines for the Chronic Use of Opioid Analgesics.* Washington, DC: The Federation, May 2017.

Fishman S. Responsible Opioid Prescribing. Dallas, TX: The Federation; 2013. This 150-page book by pain expert Scott Fishman, M.D., translates the FSMB's model policy on pain management into practical guidelines for office-based practice.

## References

1. Parran TV, Wilford BB, DuPont RL. Clinical issues in prescribing controlled drugs. *Up-to-Date* online medical education service. 2010. <http://curseonarm.net/UPTODATE/contents/mobipreview.htm?21/41/22175?source=HISTORY>
2. Dart RC, Surratt HL, Cicero TJ, et al. Trends in opioid analgesic abuse and mortality in the United States. *NEJM.* 2015 Jan 15;372(3):241–248.
3. Portenoy RK. Opioid therapy for chronic non-malignant pain: A review of critical issues. *J Pain Symptom Manag.* 1996;11:203–217.
4. Federation of State Medical Boards (FSMB). *Guidelines for the Chronic Use of Opioid Analgesics.* Washington, DC: The Federation, May 2017.
5. Finch JW, Parran TV, Wilford BB, et al. Clinical, legal and ethical considerations in prescribing drugs with abuse potential (Chapter 109). In Ries RK, Alford DP, Saitz R, Miller S, eds. *Principles of Addiction Medicine, Fifth Edition.* Philadelphia, PA: Lippincott, Williams & Wilkins; 2014.
6. Substance Abuse and Mental Health Services Administration (SAMHSA). *Training Curriculum for Courses on Office-Based Opioid Treatment with Buprenorphine.* Rockville, MD: SAMHSA, U.S. Department of Health and Human Services; 2014.
7. Longo LP, Parran TV, Johnson B, et al. Addiction, Part II. Identification and management of the drug-seeking patient. *Am Fam Physician.* 2000;61:2401–2408.
8. American Medical Association (AMA). Drug abuse related to prescribing practices (Report of the Council on Scientific Affairs). *JAMA.* 1982;247:864–866. [Updated 1992, 2002, 2012.]
9. Federation of State Medical Boards (FSMB). *Model Policy on Opioid Addiction Treatment in the Medical Office.* Dallas, TX: The Federation; 2013.

10. Parran TV. Prescription drug abuse: A question of balance. *Mad Clin North Am.* 1997;81(4):967–978.
11. Longo LP, Parran TV, Johnson B, et al. Addiction, Part II. Identification and management of the drug-seeking patient. *Am Fam Physician.* 2000;61:2401–2408.
12. Isaacson JH, Hopper JA, Alford DP, et al. Prescription drug use and abuse. Risk factors, red flags, and prevention strategies. *Postgrad Med.* 2005;118:19.
13. Parran T, Grey S, Adelman C. The role of disabled physicians in the diversion of controlled drugs. *J Addict Dis.* 2000;19(3):35–42.
14. Michna E, Ross EL, Hynes WL, et al. Predicting aberrant drug behavior in patients treated for chronic pain: Importance of abuse history. *J Pain Symptom Manag.* 2004 Sep;22(3):250–258.
15. Reed MC, Engles-Horton LL, et al. Use of opioid medications for chronic non-cancer pain in primary care. *J Gen Intern Med.* 2002;17:173–179.
16. Volkow ND, Fowler JS, Wang GJ. The addicted human brain viewed in the light of imaging studies: Brain circuits and treatment strategies. *Neuropharmacology.* 2004;47(Suppl 1):3.
17. Zacny J, Bigelow G, Compton P, et al. College on Problems of Drug Dependence Taskforce on Prescription Opioid Non-Medical Use and Abuse: Position statement. *Drug Alc Depend.* 2003;69:215–232.
18. DuPont RL. *The Selfish Brain—Learning from Addiction.* Center City, MN: Hazelden; 2003.
19. Council of State Governments (CSG). Drug abuse in America—Prescription drug diversion. *Trends Alert.* Lexington, KY: The Council; April 2004.
20. Coleman JJ, Bensinger PB, Gold MS, et al. Can drug design inhibit abuse? *J Psychoact Drug.* 2005;37(4):343–362.
21. Czechochowitz D, ed. *Prescription Drug Abuse and Addiction* (NIDA Research Report Series, 7/2001; NIH Publication # 01-4881). Rockville, MD: NIDA, National Institutes of Health; 2001.
22. Center for Substance Abuse Treatment (CSAT). *Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction.* Treatment Improvement Protocol (TIP) Series 40. DHHS Publication No. (SMA) 04-3939. Rockville, MD: CSAT, Substance Abuse and Mental Health Services Administration; 2004.
23. Michna E, Ross EL, Hynes WL, et al. Predicting aberrant drug behavior in patients treated for chronic pain: Importance of abuse history. *J Pain Symptom Manag.* 2004;28:250.
24. Veterans Health Administration (VHA), Department of Veterans Affairs. *VHA/DoD Clinical Practice Guidelines for Management of Substance Use Disorders (SUD), Version 2.0.* Washington, DC: VHA, Department of Veterans Affairs; 2009.
25. Institute for Research, Education and Training in Addiction (IRETA). *Best Practices in the Use of Buprenorphine. Final Expert Panel Report.* Pittsburgh, PA: IRETA, Community Care Behavioral Health Organizations; October 18, 2011.
26. Substance Abuse and Mental Health Services Administration (SAMHSA). *Opioid Overdose Prevention Toolkit.* Rockville, MD: SAMHSA, U.S. Department of Health and Human Services; 2016.
27. Cheatle MD. Prescription opioid misuse, abuse, morbidity, and mortality: Balancing effective pain management and safety. *Pain Med.* 2015 Oct;16(Suppl 1):S3–S8.